

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mark R. HELLBERG et al.

Serial No: 10/775,704 (Conf. #3340)

Filed: 10 February 2004

Examiner:

Group Art Unit: 1632

FOR: USE OF COMPOUNDS FOR TREATING CONDITIONS RESULTING FROM
INJURY TO THE CORNEAL NERVE AFTER LASIK AND OTHER OCULAR
SURGERIES OR TRAUMA**INFORMATION DISCLOSURE STATEMENT PURSUANT
TO 37 C.F.R. 1.56, 1.97, AND 1.98**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. 1.56, 1.97, and 1.98, Applicants submit the patents, articles, and other information referenced in the specification as filed. The references are listed on the attached PTO Form 1449. Applicants are submitting copies of the non-patent literature in accordance with 37 CFR 1.98(a)(2).

A copy of the International Search Report issued in the PCT application, of which the present application is a 35 U.S.C. §371 application, is also included for the Examiner's convenience.

Applicants request that the listed patents, articles, and other information be considered during prosecution of this application and that they appear among the "References Cited" on any patent issuing herefrom.

Respectfully submitted,

7 June 2004
Date

By: Teresa J. Schultz
Teresa J. Schultz
Registration No. 40,256
(817) 551-4231

Address for Correspondence:
Alcon Research, Ltd.
Attn: Teresa J. Schultz
6201 S. Freeway, Mail Code Q-148
Fort Worth, TX 76134-2099

Attorney Docket No.: 2187 US F



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Sheet	1	of	5
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U. S. PATENT DOCUMENTS

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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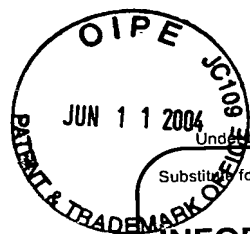
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
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Sheet	2	of	5		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	B1	Aimone et al., "The 1•,25(OH)2D3 analog CB-1093 induces nerve growth factor in non-human primate brain", SOCIETY FOR NEUROSCI. ABSTRACTS, 24:292, (1998)	
	B2	Ambrosio & Wilson, J., "Complication of Laser in situ Keratomileusis: Etiology, Prevention, and Treatment", Refractive Surgery 17:350-379 (2001)	
	B3	Anderson et al., Effect of intraocular pressure on rapid axoplasmic transport in monkey optic nerve, INVEST. OPHTHALMOL., 13:771-783 (1974)	
	B4	Beck et al., Brain-derived neurotrophic factor protects against ischemic cell damage in the rat hippocampus, J. CEREB. BLOOD FLOW METAB., 14:689-692 (1994)	
	B5	Cellerino et al., Brain-derived neurotrophic factor/neurotrophin-4 receptor TrkB is localized on ganglion cells and dopaminergics amacrine cells in the vertebrate retina, J. COMP. NEUROL.,	
	B6	Cui et al., NT-4/5 reduces naturally occurring retinal ganglion cell death in neonatal rats, NEUROREPORT, 5:1882-1884 (1994)	
	B7	Culmsee et al., NGF antisense oligonucleotide blocks protective effects of clenbuterol against glutamate-induced excitotoxicity in vitro and focal cerebral ischemia in vivo, SOCIETY FOR NEUROSCI. ABSTRACTS, 24:295 (1998)	
	B8	De Castro et al., Corneal innervation and sensitivity to noxious stimuli in trkA knockout mice, EUR. J. NEUROSCI., 10:146-152 (1998)	
	B9	Ebadi et al., Neurotrophins and their receptors in nerve injury and repair, NEUROCHEM INT., 30:347-374 (1997)	
	B10	Gao et al., Elevated mRNA expression of brain-derived neurotrophic factor in retinal ganglion cell layer after optic nerve injury, INVEST. OPHTHALMOL. VIS. SCI., 38:1840-1847 (1997)	

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Sheet	3	of	5	Attorney Docket Number	2187 US F

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	C1	Graul & Castaner, AIT-082, DRUGS OF THE FUTURE, 22:945-947 (1997)	
	C2	Grønborg et al., Neuroprotection by a novel compound, NS521, SOCIETY FOR NEUROSCI. ABSTRACTS, 24:1551 (1998)	
	C3	Jelsma et al., Different forms of the neurotrophin receptor trkB mRNA predominate in rat retina and optic nerve, J. NEUROBIOL., 24:1207-1214 (1993)	
	C4	Kaplan et al., Signal transduction by the neurotrophin receptors, CURR. OPIN. CELL BIOL., 9:213-221 (1997)	
	C5	Kirsch et al., Evidence for multiple, local functions of ciliary neurotrophic factor (CNTF) in retinal development: expression of CNTF and its receptors and in vitro effects on target cells, J. NEUROCHEM., 68:979-990 (1997)	
	C6	Lambiase et al., "Expression of nerve growth factor receptors on the ocular surface in healthy subjects and during manifestation of inflammatory diseases", INVEST. OPHTHALMOL. VIS. SCI., 39:1272-1275 (1998)	
	C7	Lambiase et al., "Nerve growth factor promotes corneal healing: structural, biochemical, and molecular analyses of rat and human corneas", INVEST. OPHTHALMOL. VIS. SCI., 41:1063-1069 (2000)	
	C8	Lewin et al., Physiology of the neurotrophins, ANN. REV. NEUROSCI., 19:289-317 (1997)	
	C9	Lindholm et al., Brain-derived neurotrophic factor is a survival factor for cultured rat cerebellar granule neurons and protects them against glutamate-induced neurotoxicity, Appln EUR. J. NEUROSCI., 5:1455-1464 (1993)	
	C10	Mansour-Robaey et al., Effects of ocular injury and administration of brain-derived neurotrophic factor on survival and regrowth of axotomized retinal ganglion cells, PROC. NATL. ACAD. SCI. USA, 91:1632-1636 (1994)	

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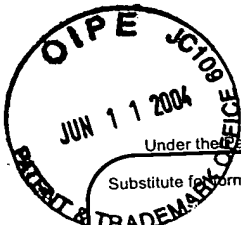
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Sheet	4	of	5		

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	D1	Matsui et al., Protective effects of ONO-2506 on neurological deficits and brain infarct volume following 1 week of permanent occlusion of middle cerebral artery in rats, SOCIETY FOR NEUROSCI. ABSTRACTS, 24:254 (1998)	
	D2	Mey et al., Intravitreal injections of neurotrophic factors support the survival of axotomized retinal ganglion cells in adult rats in vivo, BRAIN RES., 602:304-317 (1993)	
	D3	Meyer-Franke et al., Characterization of the signaling interactions that promote the survival and growth of developing retinal ganglion cells in culture, NEURON, 15:805-819 (1995)	
	D4	Nabeshima et al., Oral administration of NGF synthesis stimulators recovers reduced brain NGF content in aged rats and cognitive dysfunction in basal-forebrain-lesioned rats, GERONTOLOGY, 40(supp. 2):46-56 (1994)	
	D5	Ophthalmic Surgery: Principles of Practice, Ed., G.L. Spaeth, W.B. Sanders Co., Philadelphia, PA, U.S.A., pages 85-87 (1990)	
	D6	Quigley et al., The dynamics and location of axonal transport blockade by acute intraocular pressure elevation in primate optic nerve, INVEST. OPHTHALMOL., 15:606-616 (1976)	
	D7	Raff et al., Programmed cell death and the control of cell survival: lessons from the nervous system, SCIENCE, 262:695-700 (1993)	
	D8	Rickman et al., Expression of the protooncogene, trk, receptors in the developing rat retina, VIS. NEUROSCI., 12:215-222 (1995)	
	D9	Segal et al., Intracellular signaling pathways activated by neurotrophic factors, ANN. REV. NEUROSCI., 19:463-489 (1996)	
	D10	Ugolini et al., TrkA, TrkB and p75 mRNA expression is developmentally regulated in the rat retina, BRAIN RES, 704:121-124 (1995)	

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Sheet 5 of 5

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	E1	Unoki et al., Protection of the rat retina from ischemic injury by brain-derived neurotrophic factor, ciliary neurotrophic factor, and basic fibroblast growth factor, INVEST. OPHTHALMOL. VIS. SCI., 35:907-915 (1994)	
	E2	Weibel et al., Brain-derived neurotrophic factor (BDNF) prevents lesion-induced axonal die-back in young rat optic nerve, BRAIN RES., 679:249-254 (1995)	
	E3	Wilson, "Laser In Situ Keratomileusis-induced (Presumed) Neurotrophic Epitheliopathy", OPHTHALMOLOGY 108:1082-1087 (2001)	
	E4	Yu, SYMPOSIUM ON CATARACT, IOL AND REFRACTORY SURGERY, Abstract 263 (2000)	

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